a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.

3. (Amended) A three-dimensional structure estimation apparatus which measures a depth distance to an object on an image and outputs a depth image, comprising:

a plurality of first cameras for producing images of the object from different angles and having different resolutions from each other;

a plurality of second cameras for producing images of the object from different angles and having different visual fields from each other;

conversion means for converting the images outputted from said first and second cameras into images whose pixel units are equal in magnitude; and

a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.

5. (Amended) A three-dimensional structure estimation apparatus which measures a depth distance to an object on an image and outputs a depth image, comprising:

a plurality of cameras for producing images of the object from different angles and having different resolutions from each other;

conversion means for converting the images produced by said cameras into images whose pixel units are equal in magnitude by parallel movement by different movement amounts; and

a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.

6. (Amended) A three-dimensional structure estimation apparatus which measures a depth distance to an object on a image and outputs a depth image, comprising:

a plurality of first cameras for producing images of the object from different angles and having different resolutions from each other;

a plurality of second cameras for producing images of the object from different angles and having different visual fields from each other;

conversion means for converting the images produced by first and second said cameras into images whose pixel units are equal in magnitude by parallel movement by different movement amounts; and

a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.

7. (Amended) A three-dimensional structure estimation apparatus which measures a depth distance to an object on an image and outputs a depth image, comprising:

a plurality of cameras for producing images of the object from different angles and having different resolutions from each other;

B2 cont

a conversion unit for converting the images outputted from said cameras into images whose pixel units are equal in magnitude; and

C2, cont'd

a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.

8. (Amended) A three-dimensional structure estimation apparatus which measures a depth distance to an object on an image and outputs a depth image, comprising:

a plurality of first cameras for producing images of the object from different angles and having different resolutions from each other;

a plurality of second cameras for producing images of the object from different angles and having different visual fields from each other;

a conversion unit for converting the images outputted from said first and second cameras into images whose pixel units are equal in magnitude; and

a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.

9. (Amended) A three-dimensional structure estimation apparatus which measures a depth distance to an object on an image and outputs a depth image, comprising:

a plurality of cameras for producing images of the object from different angles and having different resolutions from each other;

a conversion unit for converting the images produced by said cameras into images whose pixel units are equal in magnitude by parallel movement by different movement amounts; and

a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.

B2 cont'd

10. (Amended) A three-dimensional structure estimation apparatus which measures a depth distance to an object on an image and outputs a depth image, comprising:

C2 cont'd.

a plurality of first cameras for producing images of the object from different angles and having different resolutions from each other;

a plurality of second cameras for producing images of the object from different angles and having different visual fields from each other;

a conversion unit for converting the images produced by first and second said cameras into images whose pixel units are equal in magnitude by parallel movement by different movement amounts; and

a depth image production section for comparing the images whose pixel units are equal in magnitude to calculate a depth distance to the object on the image to produce a depth image and outputting the depth image.